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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/679,180	10/03/2003	William L. Black	2063.005800	2309

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WILLIAMS, MORGAN & AMERSON
10333 RICHMOND, SUITE 1100
HOUSTON, TX 77042

EXAMINER

GILMAN, ALEXANDER

ART UNIT	PAPER NUMBER
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2833

DATE MAILED: 08/03/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/679,180

Applicant(s)

BLACK ET AL.

Examiner

Alexander D. Gilman

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 01 June 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-21 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-21 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Prosecution on the merits of this application is reopened on claims 1-11 and 13-19, 21 considered unpatentable for the reasons indicated below:

Double Patenting

A rejection based on double patenting of the "same invention" type finds its support in the language of 35 U.S.C. 101 which states that "whoever invents or discovers any new and useful process ... may obtain : patent therefor ..." (Emphàsis added). Thus, the term "same invention," in this context, means an invention drawn to identical subject matter. See *Miller B. Eagle Mfg. Co.*, 151 U.S. 186 (1894)., *In re Ocke*#, 245 F.2d 467, 1 14 USPQ 330 (CCPA 1957)', and *In re Vogel*, 422 F.2d 438, 164

USPQ 619 (CCPA 1970).

A statutory type (35 U.S.C. 101) double patenting rejection can be overcome by canceling or amending the conflicting claims so they are no longer coextensive in scope. The filing of a terminal disclaimer cannot overcome a double patenting rejection based upon 35 U.S.C. 101.

Claims 1-11 and 13-19, 21 are provisionally rejected under 35 U.S.C. 101 as claiming the same invention as that of claims 1-14 and 18-25 of copending Application No. 10/649,074. This is a provisional double patenting rejection since the conflicting claims have not in fact been patented.

The sole difference between the claim sets is the intended use. However, a recitation of the intended use of the claimed invention must result in a structural difference between the claimed

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invention and the prior art in order to patentably distinguish the claimed invention from the prior art. If the prior art structure is capable of performing the intended use, then it meets the claim. See *in re Casey*, 370 F.2d 576, 152 USPQ 235 (CCPA 1967) and *In re Otto*, 312 F.2d 937, 939, 136 USPQ 458, 459 (CCPA 1963). Since the claims do not express or imply a structural difference, they are not seen to be patentably distinct.

Claims 1 , 8-12 are rejected under 35 U.S.C. 102(e) as being anticipated by Rafert.

With regard to claim 1 , Rafert (US 6,497,659) discloses (Fig. 1 , 2, 3, 8, 14) dependent device (10), comprising:

an interconnect for a location at least one bus (12 or) adapted to provide at least one bus signal to the location dependent device , and

a plurality of electrical contacts (24, 26 or 56, 58, 60) external to the location dependent device and capable of providing a signal indicative of a physical location of the location dependent device when the location dependent device is installed.

With regard to claim 8, Rafert discloses that at least one circuit element (22) deployed intermediate then first electrical contact and the at least one second electrical contact.

With regard to claims 9, 10, Rafert discloses that the at least one circuit element comprises at least one of a resistor (40), a capacitor (22), a voltage reference circuit, and a trace (406) having a selected resistance.

With regard to claims 11, 12, Rafert discloses control signal and a sensor.

Claims 1, 13, 21 are rejected under 35 U.S.C. 102(b) as being anticipated by Takagi et al

With regard to claims 1, 13 Takagi (US 6,441,748) discloses (Fig. 4, 1, 2) an interconnect for a location dependent device (1), comprising:

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at least one bus (15, 16) adapted to provide at least one bus signal to the location dependent device , and

a plurality of electrical contacts (contacts of 20) external to the location dependent device and capable of providing a signal indicative of a physical location of the location dependent device when the location dependent device is installed.

Claims 1- 6, 8, 11,13, 14, 17-19 are rejected under 35 U.S.C. 102(b) as being anticipated by Card, et al. this interconnect comprises a bus ala with a plurality of contacts connecting it to a device MC'. As noted throughout the description, the pin connections are selected to provide a signal (or address) indicative of the location of the device. It is noted that this device is capable of being used for a location of dependent device as claimed. The device includes first and second contacts (see the various types in Figs. 3 and 40. In regard to claims 3 and 8, the first and second contacts are sockets (see Fig. 3).

Claims 4 and 5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Card. The use of solder is a well known alternative to pins/sockets and is used to assured continuous connections. For this reason, it would have been obvious to use soldered connections in place of the sockets of Card.

Response to Arguments

Applicant's arguments filed 05/26/2006 have been fully considered but they are not persuasive.

Applicants argue that a difference between "a location dependent device" and "an attitude control device" predetermines the difference in the respective interconnects.

However, terms “a location dependent device” and “an attitude control device” are not self-explanatory. Both terms describe a device having a property related to the device attitude (position) or location. Applicants do not discuss why the device on a missile should be termed “an attitude control device” and cannot be termed a location dependent device. As it was shown in the rejection, a recitation of the intended use of the claimed invention must result in a structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art. Since the claims do not express or imply a structural difference, they are not seen to be patentably distinct.

Applicants argue that Takagi is completely silent with regard to any contacts present within the differential GPS units 20 and fails to teach or suggest a plurality of contacts capable of providing a signal indicative of a physical location of the location dependent device when the location dependent device is installed. as set forth in claims 1 and 13.

However, it is inherently that GPS units to properly function should have contacts capable of providing a signal (23) indicative of a physical location dependent device when the location dependent device is installed (Fig. 8 of Takagi et al). Any GPS device being an electronic device should include a plurality of contacts which a part of a mechanism providing a signal indicative of a physical location of a location dependent device.

Applicants argue that in Rafert the capacitor 22 (or other electrical circuit) indicates that the sensor associated with the capacitor 22 (or other electrical circuit) is connected, but it provides no indication of the physical location of the sensor.

It was interpreted that the capacitor 22 (or other electrical circuit) indicates that the specified sensor properly mated (not a different one). Hence the proper disposition of the

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sensor is confirmed. Applicants argue that the cable 12 is not a bus. However, according to The Dictionary of Electronic , 6ty Ed. "bus" is defined as a main conductor in a circuit.

Regarding Card's argument. While Card do not uses term "physical location", the procedures described specify (and bus address indicates) a physical location of the elements relative to each other.

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Alexander D. Gilman whose telephone number is 571 272-2004. The examiner can normally be reached on Monday-Friday, 10:30 a.m. - 8:00 p.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Paula A. Bradley can be reached on 571 272-2800 ext. 33. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

07/31/2006

A handwritten signature in black ink, appearing to read "Alex Gilman".

ALEXANDER GILMAN
PRIMARY EXAMINER